Remarks

Claims 1-14 were pending.

Claim 1 is original.

Claims 2-12 are as previously presented.

Claim 13 is cancelled.

Claim 14 is amended.

The application now contains claims 1-12 and 14.

Claim 14 is amended to be dependent on claim 3. Support is inherent in the claim. No new matter is added.

Objections

Claim 13 is objected to for not further limiting the claim from which it depends. Claim 13 is cancelled. Applicants therefore kindly ask that the objections be withdrawn.

Rejections

Claims 1-14 are rejected under 35 USC 103(a) as being obvious over Yanagimachi et.al., US 5,696,758 in view of Wolleb, et.al., US 2002/0099204.

Claims 1-14 are also rejected under 35 USC 103(a) as being obvious over Yanagimachi et.al., US 5,696,758 in view of Wolleb, et.al., US 2002/0099204 in further view of any one of three disclosures of Namba.

Applicants respectfully traverse the rejections and submit that no prima facie case for obviousness exists as detailed below.

Yanagimachi discloses optical recording media similar to the layered construction of the instant invention but does not disclose the instant phthalocyanine compounds nor the method of recording and playing back at wavelengths of from 350 to 500 nm. Wolleb discloses optical recording media containing phthalocyanines, which, contrary to the assertion in the Action, are not those of the instant invention. Wolleb mentions lasers with wavelengths of 442 nm and 457 nm.

Applicants respectfully point out that the present Action fails to appreciate a significant feature of the instant invention. Unlike Wolleb, and Yanagimachi, the instant phthalocyanines according to formula (I) are **octa**coordinated and the group 4-10 metal is in the oxidation state **+4**. Also, formula I was drawn in such a way as to try and make clear that the metal is outside the phthalocyanine or naphthalocyanine plane. The instant phthalocyanines are therefore explicitly non-planar compounds, which non-planarity confers a high absorption at the shorter wavelengths, note, for example, the extremely high extinction coefficient at 334 nm for the compounds of examples 1 and 2 on page 27 of the instant specification. It is this shift in absorbance that makes the instant compounds suitable for blue laser recording which typically uses wavelengths of about 405 nm.

Thus, the invention explicitly provides recording media better suited for blue laser applications due to the incorporation of the octa-coordinated, non-planar phthalocyanines as related, for example, page 2 of the specification and further detailed in the second , third and forth paragraphs of page 15.

The polycoordinated ligands of formula I are a necessary component for providing the instant compounds with the desired 3-dimensional structure and electronic properties. In contrast, the compounds of the cited art are the commonly encountered planar species which are tetra- or at maximum pentacoordinated phthalocyanines.

The polydentate ligands of formula I are therefore not present as quenchers as suggested in the Action nor is providing increased light stability the fundamental purpose of the invention. (Applicants are aware of standard stabilization techniques and do discuss their applicability in the instant invention on page 14 of the specification.) Applicants, as discussed further below, also respectfully disagree with the assertion that such octacoordinated, non-planar structures are available by simply adding an acetoacetate nickel quencher to the optical media of Yanagimachi or Wolleb.

For example, the metal, for example in Yanagimachi, in is in the oxidation state +2 (metal), +3 (metal halide) and +4 solely in the case of a metal oxide, the only example of which is VO (col. 8 / line 30). However, vanadyl phthalocyanine is known to be planar and stable in apolar solvents such as required for spin coating. The spectrum corresponds largely to that of other typical phthalocyanine pigments, such as copper phthalocyanine and as such is not suitable for optical recording with a blue laser. The phthalocyanines of Wolleb are likewise planar species and are not related to the non-planar, octacoordinated compounds of instant formula I.

Thus, the acetylacetonato type ligand is not a quencher to protect the phthalocyanine as stated in the Action; rather, the ligand significantly changes the structure and electronic properties of the phthalocyanine dye in a way that makes the dye suitable for recording with a blue laser. The instant phthalocyanines were not contemplated or suggested in Yanagimachi or Wolleb nor could their advantages be guessed in light of the cited art.

Given the fundamental differences between the planar phthalocyanines of the art and the non-planar phthalocyanines of the instant invention, Applicants respectfully submit that no prima facie case for obviousness exists and kindly ask that the rejections over Yanagimachi and Wolleb be withdrawn.

The Examiner deems however, that nickel dithiolate quencher compounds mentioned in Wolleb would undergo a ligand exchange with the phthalocyanines of Yanagimachi or Wolleb and generate compounds equivalent to the instant phthalocyanines. Applicants respectfully note that nickel dithiolate is an excellent quencher because it is itself particularly stable and that nickel ions are known in the field to have a better affinity to sulfur than to oxygen. Applicants believe that there is no reason to expect that under that mild conditions encountered that such an exchange is feasible. Also, if the exchange took place as suggested, a new, presumably insoluble, nickel compound would also form which would certainly have some impact on the performance of the media and Applicants know of no evidence that the performance of the media containing these compounds exhibits such a difference.

Furthermore, as noted by the Examiner in introducing the Namba references, any exchange with nickel dithiolate would not result in the compounds of the instant invention. Regarding the Namba references and the compounds therein, Applicants maintain that again, there is no reason to expect that under that mild conditions encountered such an exchange is feasible.

Regarding the mention in Wolleb of lasers with wavelengths of 442 nm and 457 nm Applicants respectfully aver that as Wolleb does not disclose recording media with the phthalocyanine dyes of the instant invention it is irrelevant what range of laser wavelengths are disclosed.

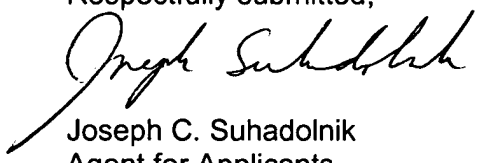
Additionally, Applicants point out that Wolleb lists a variety of commercial lasers with wavelengths of 635, 650, 670, 680, 780 or 830 nm, or 390-430 nm, or .... 602, 612, 633, 647, or 442 and 457 nm. Applicants submit that this is merely a laundry list of commonly available lasers given without any guidance as to which is preferable or which will provide the best results. Applicants note that Wolleb also states in paragraph 137 that "Recording and reproduction preferably take place in the wavelength range from 400 to 500 nm or, particularly preferably, from 600 to 830 nm". Applicants respectfully assert that the Wolleb particularly prefers the wavelengths 600 to 830 because those wavelengths are most applicable.

Nonetheless, as stated above, Applicants respectfully aver that as Wolleb does not disclose recording media with the phthalocyanine dyes of the instant invention, it is irrelevant what range of laser wavelengths are disclosed.

Given the discussion above and the fundamental differences between the planar phthalocyanines of the cited art and the non-planar phthalocyanines of the instant invention, Applicants again respectfully submit that no prima facie case for obviousness exists and kindly ask that all rejections over the combined Yanagimachi and Wolleb and the combined Yanagimachi, Wolleb and Namba be withdrawn and kindly ask that claims 1-12 and 14 be found allowable.

In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

Respectfully submitted,



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